

IN THE CLAIMS:

The following listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A computer-implemented method for accessing data from a semaphore in a computer system, comprising:

including a first software component in a first application, wherein the first software component is operable to access data from the semaphore, wherein the semaphore is stored in a computer memory, wherein the semaphore is operable to store data of any of a plurality of different data types, wherein the data comprised in the semaphore has a first data type of [[a]] the plurality of different data types;

executing the first application;

receiving a uniform resource locator (URL) which specifies a location of the semaphore, wherein the ~~location information URL~~ is received in response to user input;

the first software component connecting to the computer memory using the location information;

the first software component accessing the data comprised in the semaphore; and

the first software component converting the data into a format useable by the first application after the first software component connects to the computer memory and receives the data.

2. (Original) The method of claim 1, wherein the first software component performs a locked read-modify-write operation on the data comprised in the semaphore.

3. (Original) The method of claim 1, wherein the first software component accessing the data comprised in the semaphore comprises:

the first software component locking the semaphore;

the first software component reading the data comprised in the semaphore;

the first software component writing new data to the semaphore; and

the first software component unlocking the semaphore after said writing new data to the semaphore.

4. (Original) The method of claim 3, further comprising:
receiving one or more requests to perform a locked read-modify-write operation on the data comprised in the semaphore from other software components;
storing said one or more requests in a queue; and
wherein said one or more requests are processed after said unlocking.

5. (Original) The method of claim 1, further comprising:
the first application receiving and processing the data after said converting;
wherein the first application uses the data comprised in the semaphore to synchronize operations with a second application executing on a second computer system.

6. (Original) The method of claim 5, further comprising:
the first software component notifying the application that the data has been obtained after the software component connecting to the semaphore and receiving the data; and
wherein the application receives and processes the data after said notifying.

7. (Original) The method of claim 5, wherein the software component connecting to the semaphore, the software component receiving the data, the software component converting the data, and the application receiving and processing the data are performed a plurality of times.

8. (Original) The method of claim 1, wherein the software component connecting to the semaphore, the software component receiving the data, and the software component converting the data are performed without any user programming required.

9. (Original) The method of claim 1, wherein the format is a self-describing format.

10. (Original) The method of claim 1, wherein said converting comprises converting the data into a generic format.

11. (Original) The method of claim 1, wherein said converting comprises:
converting the data into a first format, wherein the first format includes the data and one or more attributes of the data.

12. (Currently Amended) The method of claim 1, wherein the first software component is comprised in a first computer system,

the method further comprising:

including a second software component in a second application, wherein the second software component is comprised in a second computer system, wherein the second software component is operable to access the data [[from]] comprised in the semaphore;

executing the second application;

~~receiving a uniform resource locator (URL) which specifies a location of the semaphore, wherein the location information is received in response to user input;~~

the second software component receiving the URL which specifies the location of the semaphore;

the second software component connecting to the computer memory and receiving the data comprised in the semaphore using the location information; and

the second software component converting the data into a format useable by the second application after the second software component connects to the computer memory and receives the data.

13. (Original) The method of claim 12, wherein the first and second applications use the semaphore to synchronize operation of the first and second applications.

14. (Original) The method of claim 12, wherein the first computer system, the second computer system, and the computer memory are connected through a network.

15. (Currently Amended) The method of claim 12, wherein the computer memory storing the semaphore is comprised in ~~one~~ of the first computer system or the second computer system.

16. (Original) The method of claim 1, wherein accessing data from a semaphore in a computer system comprises publishing or writing data to the semaphore.

Claims 17-18 (Canceled)

19. (Currently Amended) A system which enables a plurality of computer systems to share a semaphore in a computer memory, the system comprising:

a computer memory which stores the semaphore, wherein the semaphore is operable to store data corresponding to [[one]] any of a plurality of different data types;

wherein each computer system of the plurality of computer systems stores a corresponding software component in a corresponding application, wherein the corresponding software component is operable to access the semaphore, wherein the semaphore data comprises a first data type of [[a]] the plurality of different data types;

wherein each software component is operable to receive a uniform resource locator (URL) which specifies a location of the semaphore, wherein the URL is received in response to user input;

wherein each software component is operable to ~~connect to~~ access the semaphore and ~~receiving~~ the data comprised in the semaphore using the URL; and

wherein each software component ~~converts~~ is operable to convert the data into a format useable by its corresponding application after each software component connects to the semaphore and receives the data.

20. (Original) The system of claim 19, wherein one or more of the corresponding software components perform a locked read-modify-write operation on the data comprised in the semaphore.

21. (Original) The system of claim 19, further comprising:
each corresponding application receiving and processing the data after said converting.

22. (Original) The system of claim 19, wherein each software component connecting to the semaphore, each software component receiving the data, and each software component converting the data are performed without any user programming required.

23. (Original) The system of claim 19, wherein said converting comprises:
converting the data into a first format, wherein the first format includes the data and one or more attributes of the data.

Claims 24-28 (Canceled)

29. (New) A system for accessing a semaphore, the system comprising:
a first computer system, wherein the first computer system comprises a first processor and a first memory medium, wherein the first processor is coupled to the first memory medium; and

a computer memory, wherein the computer memory comprises the semaphore, wherein the semaphore is operable to store data of any of a plurality of different data types, wherein the semaphore comprises data of a first data type of the plurality of different data types, wherein the computer memory is coupled to the first computer system;

wherein the first memory medium comprises a first software component, wherein the first software component is executable by the first processor to:

access the semaphore, wherein, in said accessing the semaphore, the first software component is further executable by the first processor to access the data comprised in the semaphore, wherein accessing the data comprised in the semaphore is performed irrespective of the first data type of the data comprised in the semaphore.

30. (New) The system of claim 29, wherein the first software component is further executable by the first processor to:

receive user input specifying a uniform resource locator (URL), wherein the URL indicates location information of the semaphore; and

communicatively couple to the computer memory, wherein, in said communicatively coupling, the first software component is further executable by the first processor to use the location information.

31. (New) The system of claim 30, further comprising:

a network;

wherein the first computer system is coupled to the network;

wherein the computer memory is coupled to the network;

wherein, in said accessing the semaphore, the first software component is further executable by the first processor to communicate through the network with the computer memory.

32. (New) The system of claim 31, wherein the location information is a network location of the network.

33. (New) The system of claim 29, wherein the first software component is further executable by the first processor to:

convert the data comprised in the semaphore to a second data type, wherein the second data type is different from the first data type.

32. (New) The system of claim 29, further comprising:

a second computer system, wherein the second computer system comprises a second processor and a second memory medium, wherein the second processor is coupled to the second memory medium;

wherein the second memory medium comprises a second software component, wherein the second software component is executable by the second processor to:

access the semaphore, wherein, in said accessing the semaphore, the second software component is further executable by the second processor to access the data comprised in the semaphore, wherein accessing the data comprised in the semaphore is performed irrespective of the first data type of the data comprised in the semaphore.

33. (New) A memory medium comprising program instructions which are executable by a processor to:

access a semaphore, wherein the semaphore is operable to store data of any of a plurality of different data types;

wherein, in said accessing the semaphore, the program instructions are further executable to access data comprised in the semaphore, wherein accessing the data comprised in the semaphore is performed irrespective of a data type of the data comprised in the semaphore.

34. (New) The memory medium of claim 33, wherein the program instructions are further executable to:

receive location information of the semaphore;

wherein, in said accessing the semaphore, the program instructions are further executable to use the location information in performing said accessing the semaphore.

35. (New) The memory medium of claim 34,

wherein, in said receiving the location information, the program instructions are further executable to receive a uniform resource locator (URL) via user input, wherein the URL indicates the location information.

36. (New) The memory medium of claim 34,

wherein the location information indicates a network location associated with a network;

wherein, in said accessing the semaphore, the program instructions are further executable to communicatively couple to the network location through the network.

37. (New) The memory medium of claim 33, wherein the program instructions are further executable to:

convert the data type of the data comprised in the semaphore to a different data type.

38. (New) The memory medium of claim 33, wherein the program instructions are further executable to:

perform a locked read-modify-write operation on the data comprised in the semaphore.

39. (New) The memory medium of claim 33, wherein the program instructions are further executable to:

convert the data comprised in the semaphore to a format, wherein the format comprises the data comprised in the semaphore and at least one attribute associated with the data comprised in the semaphore.

40. (New) A computer-implemented method for accessing data from a semaphore, comprising:

including a first software component in a first application, wherein the first software component is operable to access data from the semaphore, wherein the semaphore is stored in a computer memory, wherein the semaphore is operable to store data of any of a plurality of different data types, wherein the data comprised in the semaphore has a first data type of the plurality of different data types;

executing the first application;

receiving user input which specifies location information of the semaphore;

the first software component communicating with the computer memory using the location information;

the first software component accessing at least a portion of data comprised in the semaphore; and

the first software component converting the at least the portion of the data to a format useable by the first application.

41. (New) The method of claim 40,

wherein communicating with the computer memory using the location information comprises using a data socket.

42. (New) The method of claim 41,

wherein said receiving user input which specifies the location information of the semaphore comprises receiving a uniform resource locator (URL) which indicates the location information.

43. (New) A computer-implemented method for accessing a semaphore, comprising:

receiving user input specifying location information associated with the semaphore;

communicating with a memory medium, wherein the memory medium comprises the semaphore, wherein said communicating comprises using the location information; and

accessing at least a portion of data comprised in the semaphore.

44. (New) The method of claim 43, wherein the semaphore is operable to store data of any of a plurality of different data types, wherein the data comprised in the semaphore is of a first data type of the plurality of different data types.

45. (New) The method of claim 44, wherein the plurality of different data types includes two or more of a number data type, a Boolean data type, a string data type, and an array data type.

46. (New) The method of claim 44, further comprising:
converting the at least portion of the data to a second data type, wherein the first data type and the second data type are different data types.

47. (New) The method of claim 43,
wherein said communicating with the memory medium comprises using a data socket, wherein the data socket uses the location information.

48. (New) The method of claim 43,
wherein the memory medium is coupled to a network;
wherein said communicating with the memory medium comprises using the network.

49. (New) The method of claim 48,
wherein the location information comprises network location information.

50. (New) The method of claim 49,
wherein said receiving user input includes receiving a uniform resource locator (URL) which indicates the network location information.

51. (New) The method of claim 48, wherein the memory medium is comprised in a computer system coupled to the network.

52. (New) The method of claim 43,
wherein said receiving user input includes receiving a uniform resource locator (URL) which indicates the location information.

53. (New) A computer-implemented method for accessing a semaphore, comprising:

communicating with a memory medium comprising the semaphore, wherein the memory medium is coupled to a network; and

accessing at least a portion of data comprised in the semaphore through the network.

54. (New) The method of claim 53, wherein the semaphore is operable to store data of any of a plurality of different data types, wherein the data comprised in the semaphore is of a first data type of the plurality of different data types.

55. (New) The method of claim 54, wherein the plurality of different data types includes two or more of a number data type, a Boolean data type, a string data type, and an array data type.

56. (New) The method of claim 53, further comprising:
receiving network location information associated with a network location of the semaphore.

57. (New) The method of claim 56,
wherein said receiving the network location information associated with the network location of the semaphore comprises receiving a uniform resource locator (URL) which indicates the network location information.